

July 2015

Meade County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 11 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Meade County economy.¹ These 11 sectors have a total direct output of approximately \$242 million and support 535.2 jobs in Meade County. Running the model for all 11 sectors simultaneously produces the following results:

Agriculture Contribution in Meade County

Impact Type ²	Employment	% of Total Employment	Total Value Added ³	% of Gross Regional Product ⁴	Output ⁵	% of Gross Regional Product
Direct Effect	535.2	22%	\$47,005,977	30%	\$242,386,758	157%
Indirect Effect	265.2	11%	\$19,575,832	13%	\$35,003,663	23%
Induced Effect	73.5	3%	\$5,353,430	3%	\$9,442,534	6%
Total Effect	873.9	35%	\$71,935,240	47%	\$286,832,954	186%

As shown in the above table, agriculture, food, and food processing supports 873.9 jobs, or 35% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$287 million, roughly 186% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 11 agriculture, food, and food processing sectors is approximately \$72 million, or 47% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 47% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Grain farming is the top employer in the agriculture industry with 260.0 employees. This table also shows the amount of jobs that are created by the agriculture industry in Meade County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Grain farming	260.0	\$137,283,461
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	163.7	\$63,969,060
Wholesale trade.....	72.8	\$14,858,282
Support activities for agriculture and forestry	70.6	\$4,783,263
All other crop farming.....	39.6	\$7,580,736
Animal production, except cattle and poultry and eggs.....	36.6	\$5,591,573
Truck transportation.....	27.6	\$4,429,457
Monetary authorities and depository credit intermediation	25.4	\$4,208,829
Accounting, tax preparation, bookkeeping, and payroll services	17.7	\$712,470
Maintenance and repair construction of nonresidential structures	13.8	\$2,161,740

The Grain farming industry directly contributes approximately \$137 million to Meade County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Grain farming	260.0	\$137,283,461
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	163.7	\$63,969,060
Wholesale trade.....	72.8	\$14,858,282
Other animal food manufacturing.....	9.2	\$13,543,172
Oilseed farming	3.1	\$10,282,809
All other crop farming.....	39.6	\$7,580,736
Animal production, except cattle and poultry and eggs.....	36.6	\$5,591,573
Support activities for agriculture and forestry	70.6	\$4,783,263
Truck transportation.....	27.6	\$4,429,457
Monetary authorities and depository credit intermediation	25.4	\$4,208,829

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Meade County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.